

February 10, 2005
Case No.: DE000157A (7790/403)
Serial No.: 10/729,251
Filed: December 5, 2003
Page 2 of 10

CLAIM LISTING

A listing of the entire set of claims 1-32 is submitted herewith per 37 CFR §1.121. This listing of claims 1-32 will replace all prior versions, and listings, of claims in the application.

1.-12. (Cancelled)

13. (Previously Presented) A microwave antenna, comprising:

a substrate (1);

a first conductor track (51, 52) formed on an exterior of said substrate (1), said first conductor track (51, 52) for operating the microwave antenna in one of a first operating frequency band and a second operating frequency band;

a second conductor track (61, 62) formed on said exterior of said substrate (1), said second conductor track (61, 62) for operating the microwave antenna in a third operating frequency band;

a feed line (45) formed on an exterior of said substrate (1), said feed line (45) being connected to said first conductor track (51, 52) and said second conductor track (61, 62); and

a feed terminal (40) formed on an exterior of said substrate (1), said feed terminal (40) being connected to said feed line (45).

14. (Previously Presented) The microwave antenna of claim 13, wherein said first conductor track (51, 52) includes:

a first conductor (51) formed on said exterior of said substrate (1) and connected to said feed line (45); and

a first metal surface (52) formed on said exterior of said substrate (1) and connected to said first conductor (51).

February 10, 2005
Case No.: DE000157A (7790/403)
Serial No.: 10/729,251
Filed: December 5, 2003
Page 3 of 10

15. (Previously Presented) The microwave antenna of claim 13, wherein said second conductor track (61, 62) includes:

a second conductor (61) formed on said exterior of said substrate (1) and connected to said feed line (45); and

a second metal surface (62) formed on said exterior of said substrate (1) and connected to said second conductor (61).

16. (Previously Presented) The microwave antenna of claim 13, further comprising:

a first tuning stub (54) formed on said exterior of said substrate (1), said first tuning stub (54) for tuning said first conductor track (51, 52) to the first operating frequency band.

17. (Previously Presented) The microwave antenna of claim 16, further comprising:

a second tuning stub (53) formed on said exterior of said substrate (1), said second tuning stub (53) for tuning said first conductor track (51, 52) to the second operating frequency band.

18. (Previously Presented) The microwave antenna of claim 13,

wherein said substrate (1) includes a side surface (11);

wherein at least a portion of said feed line (45) is parallel to said side surface (11);

and

wherein at least a portion of said first conductor track (51, 52) is nonparallel to said side surface (11).

February 10, 2005
Case No.: DE000157A (7790/403)
Serial No.: 10/729,251
Filed: December 5, 2003
Page 4 of 10

19. (Previously Presented) The microwave antenna of claim 13,
wherein said substrate (1) includes a side surface (14);
wherein at least a portion of said feed line (45) is parallel to said side surface (14);
and
wherein at least a portion of said second conductor track (61, 62) is nonparallel to
said side surface (14).
20. (Previously Presented) The microwave antenna of claim 13,
wherein said substrate (1) includes a side surface (13);
wherein at least a portion of said feed line (45) is formed on said side surface
(13); and
wherein at least a portion of said first conductor track (51, 52) is adjacent to said
side surface (11).
21. (Previously Presented) The microwave antenna of claim 13,
wherein said substrate (1) includes a side surface (12);
wherein at least a portion of said feed line (45) is formed on said side surface
(12); and
wherein at least a portion of said second conductor track (61, 62) is adjacent to
said side surface (12).

February 10, 2005
Case No.: DE000157A (7790/403)
Serial No.: 10/729,251
Filed: December 5, 2003
Page 5 of 10

22. (Previously Presented) A microwave antenna, comprising:
- a substrate (1) including a side surface (11);
 - a first conductor track (51, 52) formed on an exterior of said substrate (1), wherein at least a portion of said first conductor track (51, 52) is nonparallel to said side surface (11);
 - a second conductor track (61, 62) formed on said exterior of said substrate (1), wherein at least a portion of said second conductor track (61, 62) is nonparallel to said side surface (11);
 - a feed line (45) formed on said exterior of said substrate (1), said feed line (45) being connected to said first conductor track (51, 52) and said second conductor track (61, 62), wherein at least a portion of said feed line (45) is parallel to said side surface (11); and
 - a feed terminal (40) formed on an exterior of said substrate (1), said feed terminal (40) being connected to said feed line (45).
23. (Previously Presented) The microwave antenna of claim 22, wherein said first conductor track (51, 52) includes:
- a first conductor (51) formed on said exterior of said substrate (1) and connected to said feed line (45); and
 - a first metal surface (52) formed on said exterior of said substrate (1) and connected to said first conductor (51).

February 10, 2005
Case No.: DE000157A (7790/403)
Serial No.: 10/729,251
Filed: December 5, 2003
Page 6 of 10

24. (Previously Presented) The microwave antenna of claim 22, wherein said second conductor track (61, 62) includes:

a second conductor (61) formed on said exterior of said substrate (1) and connected to said feed line (45); and

a second metal surface (62) formed on said exterior of said substrate (1) and connected to said second conductor (61).

25. (Previously Presented) The microwave antenna of claim 22, further comprising:

a first tuning stub (54) formed on said exterior of said substrate (1), said first tuning stub (54) for tuning said first conductor track (51, 52) to a first operating frequency band.

26. (Previously Presented) The microwave antenna of claim 25, further comprising:

a second tuning stub (53) formed on said exterior of said substrate (1), said second tuning stub (53) for tuning said first conductor track (51, 52) to a second operating frequency band.

February 10, 2005
Case No.: DE000157A (7790/403)
Serial No.: 10/729,251
Filed: December 5, 2003
Page 7 of 10

27. (Previously Presented) A microwave antenna, comprising:
a substrate (1) including a first side surface (13);
a first conductor track (51, 52) formed on an exterior of said substrate (1),
wherein at least a portion of said first conductor track (51, 52) is adjacent said first side surface (13);
a second conductor track (61, 62) formed on said exterior of said substrate (1);
a feed line (45) formed on said exterior of said substrate (1), said feed line (45) being connected to said first conductor track (51, 52) and said second conductor track (61, 62), wherein at least a portion of said feed line (45) is formed on said first side surface (13); and
a feed terminal (40) formed on an exterior of said substrate (1), said feed terminal (40) being connected to said feed line (45).

28. (Previously Presented) The microwave antenna of claim 27, wherein said first conductor track (51, 52) includes:
a first conductor (51) formed on said exterior of said substrate (1) and connected to said feed line (45); and
a first metal surface (52) formed on said exterior of said substrate (1) and connected to said first conductor (51).

29. (Previously Presented) The microwave antenna of claim 27, wherein said second conductor track (61, 62) includes:
a second conductor (61) formed on said exterior of said substrate (1) and connected to said feed line (45); and
a second metal surface (62) formed on said exterior of said substrate (1) and connected to said second conductor (61).

February 10, 2005
Case No.: DE000157A (7790/403)
Serial No.: 10/729,251
Filed: December 5, 2003
Page 8 of 10

30. (Previously Presented) The microwave antenna of claim 27, further comprising:
a first tuning stub (54) formed on said exterior of said substrate (1), said first
tuning stub (54) for tuning said first conductor track (51, 52) to a first operating
frequency band.
31. (Previously Presented) The microwave antenna of claim 30, further comprising:
a second tuning stub (53) formed on said exterior of said substrate (1), said
second tuning stub (53) for tuning said first conductor track (51, 52) to a second
operating frequency band.
32. (Previously Presented) The microwave antenna of claim 27,
wherein said substrate (1) further includes a second side surface (12); and
wherein at least a portion of said second conductor track (61, 62) is adjacent said
second side surface (12).